Groundwork Milwaukee Work Plan

I. Project Title and Project Purpose Statement

Title of Project: Building Community Empowerment by Building Green Infrastructure

A. Summary description of proposed project including goals: Groundwork Milwaukee (GW Mke) will hire and train teens/young adults from the target community and teach them about the impacts of climate change and the ability of green infrastructure (GI) to lessen its impacts. The Team will in turn raise community awareness and knowledge of GI to reduce the risk of flooding through door-to-door canvasing, events and installing rain gardens, bio swales, rain gardens and trees that will improve the water-absorbing capacity of land.

B. Location of the project place: Milwaukee, WI 53206

C. Identify the related environmental statute(s) from the list in Section 1.C.: Clean Water Act, Section 104(b) (3): conduct and promote training, demonstration projects, and surveys relating to causes, effects, extent, prevention, reduction and elimination of water pollution.

Project's community climate resiliency focus: GWM's Green Team will partner with residents of the in the 30th Street Corridor of Milwaukee to install rainwater harvesting and GI demonstration projects empowering homeowners with information and innovative solutions to reduce the risk of flooding in their neighborhood.

II. Environmental, public health and community climate resiliency information about the affected community.

The local environmental, public health and climate resiliency issue(s) the project seeks to address: The most detrimental impact of climate change in this area is excessive flooding caused by increased incidents of intense rain fall. Groundwork Milwaukee works with community residents to install rain gardens, bio swales and rain barrels along the 30th Street corridor. Green infrastructure projects can significantly reduce the risk of flooding experienced by homeowners, as well as reduce the pollution carried with stormwater into the waterways in the city. We have developed a program working with job trainees in our Green Team to install these projects.

Results achieved from efforts to address the local climate resiliency issues:

	Resources/Inputs	Activities	Outputs	Outcomes
6 months into project	Residents/ Community Leaders Staff Time Work Crews Volunteers Partner Organizations	Implementation schedules Canvass residents to create awareness of issue and solution Train team members	100 residents reached through door knocks and flyers Resident MOU's signed to implement projects Install 5 Rain Gardens & 10 Rain Barrels	Increase in # of stakeholders who are aware of the immediate impacts of poor water Quality in Corridor Green Team will gain knowledge on GI

End of project	Residents/ Community Leaders Staff Time In-Kind Donations Volunteers Partner Organizations	Building Rain Gardens Installing Rain Barrels Canvassing neighborhoods for more residents to engage.	Reach 500 residents through door canvasing and flyers Install 15 Rain Gardens and 15 Rain Barrels	Increase in residents participating in projects Reduction in the risk of home flooding in project area

Characteristics of affected community: The Corridor consists of approximately 9.5 square miles located 2 miles northwest of downtown Milwaukee. For over a century, it flourished as an industrial corridor running along the north-south railroad tracks. There, tanneries, breweries, foundries, automobile manufacturing, and other industries thrived. Before the 1970's, these industries employed an estimated 40% of Corridor residents, but now, less than 15% of the local residents are employed there (WDNR, 2006). The economic downturn occurred several decades ago, at least in part, due to less reliance on rail transportation and greater automation (ATSDR, 2008). Ongoing flooding has significantly hampered redevelopment of the Corridor. The Milwaukee Metropolitan Sewerage District has embarked on an ambitious Green Infrastructure program. The activities and outcomes of this EJ grant would be complimentary to their efforts.

How affected community may be disproportionately impacted by the environmental, public health and community climate resiliency harm(s) and risk(s): The Corridor area is densely populated with more than 90,000 people or 15% of Milwaukee's 596,974 residents (ATSDR Report, 2008, based on U.S. Bureau of the Census 2000 data). Residents in the Corridor are mainly African American (92%) versus 55% for the city as a whole. More than one third (37.6%) of the residents in the Corridor live below the poverty level with the average household income just below $30,000. Nearly 25% of adults are unemployed. By comparison, 21.3% of Milwaukee residents live below the poverty level with an average household income just under $41,000. Most of the housing stock was built before 1960 (76.6% in the Corridor *vs*. 69.5% in the City); much of the Corridor housing is in poor condition. In 2005, lead poisoning among children living in the Corridor was 15.7% compared to 8.1% throughout Milwaukee and 2.7% in Wisconsin. The proportion of single-family owner-occupied housing is low (20.1% in the Corridor *vs.* 33% for Milwaukee). Median rent is $450 compared to $527 in Milwaukee, disproportionately high compared to the average assessed value of homes (< 60% that of housing in the City). Rates of aggravated assault, robbery, sex offenses, and homicides are approximately twice as common in the Corridor than in Milwaukee overall.

The Corridor has numerous brownfields (Fig. 2). A list of 22 EPA/DNR Brownfield Assessment Activities in the Corridor, presented to the community at a meeting held April 22, 2008, shows that past uses of the land included truck filling and gasoline stations; lead works; auto body and repair; a slaughter house; sheet metal work; chemical company; foundry; brass works; coal storage; oil products storage; plating facility; commercial laundry; general contracting; and various manufacturing uses (http://dnr.wi.gov/org/aw/rr/brownfields/ 30st/site-status.pdf).

Contaminants include petroleum compounds, lubricating oils, fuel oil; solvents including degreasers, dry cleaning solvents; and heavy metals including lead, arsenic, barium, and selenium. In order to attract new businesses, provide job-training incentives, and improve infrastructure and public safety, a substantial amount of work needs to be done. Parts of the Corridor have been designated a "Greenlight District," providing economic incentives for commercial and residential redevelopment (City of Milwaukee, 2007; ATSDR, 2008).

Milwaukee Metropolitan Sewerage District (MMSD) rehabilitated the nearby 9-mile long Lincoln Creek by removing its concrete lining, widening and deepening the creek and creating a more natural, meandering waterway. The main purpose was to reduce the risk of flooding (during a 1% storm) for more than 2000 nearby homes, while improving water quality.

Unfortunately, during the planning process, the City of Milwaukee gained agreement from MMSD that no loss of taxable income would occur, which limited the District's ability to adequately widen the Creek's corridor. As a result, significant flooding still occurs in the 30th St. Industrial Corridor, because storm water run-off is not able to get to the flood plain. In 2010 alone, over $32 million in damage to commercial and industrial properties occurred in the north end of the Corridor with 28 businesses closing their doors. As a result, MMSD is developing additional plans to reduce the risk of flooding and basement backups. MMSD has already determined that the best course of action is to employ multiple green infrastructure techniques to retain and treat stormwater where it falls.

How the affected community will benefit from the results of the project:
Engaged residents will benefit by decreasing the risk of flooding and basement backups and the ability to reuse harvested rainwater. With a substantial amount of GI implemented in a neighborhood, residents will reduce the amount of water going to the sewers, which in our combined sewage system reduces the potential for sewage overflows into Lake Michigan. This combination of awareness in the residents' knowledge and implementing GI practices allows communities to be more resilient to the consequences of climate change, including reducing the risk of flooding caused by more frequent and intense storms.

III. Organization's Historical Connection to the Affected Community

History of GW MKE's involvement with the Corridor including how we became involved and the length of involvement: GWM began working with "Uniting Garden Homes" in 2012 when they asked Groundwork Milwaukee for help in building a community garden. GWM assisted their community group with planning and outreach to get the neighborhood engaged, and led residents and their families in building the garden. GWM has sustained a working rapport with United Garden homes through events such as our community garden tour. GW Mke has worked with additional neighborhood groups in the Corridor, including the Metcalf Park, Franklin Heights and Abdullah Outreach.

GWM seeks to partner and work in neighborhoods most often overlooked by environmental organizations. But these groups are desperately looking for honest and dedicated partners who plan to work until the problem is solved. Many of our connections start from our Milwaukee

Urban Garden program, where we have a network of 75 community-led gardens amongst 20 neighborhoods.

How the organization has worked with the affected community's residents and/or organizations to address local environmental, public health issues and community climate resiliency (if applicable): That story runs parallel to our relationships with other community groups. Neighborhoods such as Metcalfe Park, Franklin Heights, and Amani, (all located in the 53206 zip code area), are among the hardest hit areas for crime and unemployment in the country. Groundwork have worked in these neighborhoods starting with community gardens such as Abdullah, where we helped construct their garden along with a 1000 gallon water harvesting system. Community Hands Block Watch, a group in the Franklin Heights neighborhood asked us for technical support with their garden in 2011, since then we have worked with them to start a neighborhood association as well as other projects such as orchards and yoga classes. We've partnered with the Metcalfe Park neighborhood since their first request in 2013 to start a community garden. We have additionally helped with events such as Bloom and Groom, youth engagement /stewardship building (through a Jr. Young Farmers program) and partnered with their residents on other green infrastructure programs.

How the residents of the affected community are part of the decision-making process: Groundwork Milwaukee works *with* a neighborhood, and thus GWM has established principles to only work in those neighborhoods that we are invited into, and to focus on those projects residents are most interested in. GWM also takes immense pride in using a learning approach in any community where we engage. We learn what that community deems as issues and allow those groups to be the controlling voice in projects improving their neighborhoods.

Corridor residents have already indicated to us that they are very interested in Green Infrastructure for its ability to reduce the risk of flooding that they repeated experience. During our 2014 pilot green infrastructure project, the response to our Green Team's outreach was very positive - more so than in other watersheds. Initially we were concerned that residents were only participating for the sake of the Green Team members keeping a job, and as a result, our Urban Waters Program manager discussed the projects at length with recruited residents and confirmed that they were very interested in any projects that would reduce the risk of flooding.

How the organizations efforts have increased the community's capacity to address local environmental, public health issues and community climate resiliency (if applicable): We have worked to build the capacity for leadership within our partner neighborhoods; allowing them to lead the direction of change in their neighborhoods. We have partnered to improve access to nutrient dense food by helping community garden members to grow and consume healthy foods; built stewardship of neighborhood youth through our projects; assisted community gardens in reusing rainwater and helped over 50 residents reduce the risk of basement backups and flooding through green infrastructure

How the organization maintains and sustains an ongoing relationship with the affected community's residents and/or organizations:
We maintain contact with residents through regular check-ins with community leaders. We also maintain one-on-one contact with homeowners regarding maintaining their rain gardens and rain

barrels. In the past we have block parties on blocks with the greatest concentration of GI Installations to build stewardship and share info to many stakeholders at once. We plan to continue working with organizations with whom we have built up relationships, while also partnering with new organizations made through existing partnerships.

IV. Project Description

Relying on our experience we will recruit a Green Team of five men and women, through two neighborhood organizations including in the Amani neighborhood (Dominican center) and "Uniting Garden Homes" community. We will utilize the Green Team members, who will have on-site supervision and mentoring to accomplish the following tasks:

- Neighborhood canvassing and environmental education
- Identify interested residents for placement of GI including rain gardens, bio swales and rain barrels.
- Urban Waters Program Manager, Tony Gibson, works on a design plan specific for each homeowner.
- Groundwork will purchase appropriate materials.
- Green Team (GT) crew installs plants according to the plan.
- GT teaches the homeowners to maintain the plants
- Complete a satisfaction survey with residents
- We will compile a list of completed projects.

Month one: GWM will discuss and secure signed MOU's with partnering agencies/community groups.

Month two: With assistance from partnering organizations, GW Mke will recruit and hire and will engage the Green Team members in its "Watershed 101" classes to teach them about water quality, climate change and green infrastructure. We will ascertain the level of the Green Team Members' increased understanding via pre- and post- tests. After youth demonstrate water quality knowledge and comprehension on our water quiz, the young adults will demonstrate their understanding of the importance of GI features through community interaction and presentations to youth and/or adults.

Months three - eight: Once the GT can demonstrate water quality knowledge they will go door-to-door explaining the project and recruiting participants. They will perform approximately 200 door knocks at homes through out the Corridor. We will use simplified communications, (featuring pictures and graphics) to help increase the understanding of the benefits of clean water and GI. Simplified communication methods are more readily accepted by busy residents and more easily explain the benefits of maintaining water quality and preventing flooding. Simplified communication methods also work well for lesser-schooled residents in understanding some of the non-familiar terms used when describing GI installations. We will collect a robust suite of community contact information, project photos, and project-related data for use by our Partnership. The information will not only be used to supplement monthly and end-of-project reporting, but also to determine successful strategies, to set the stage for future climate change readiness programs.

During this outreach effort, we will assess potential GI projects and have property owners provide legal permission to implement projects on their property. Once plans are set and the property owners MOU's are signed, we will implement the construction of the GI projects with our Green Team.

Once plans are set and the project owner MOU's are signed, we will implement the construction of the GI projects with our Green Team. Our established Green Team program provides GT members with the opportunity to develop and execute job readiness skills as they implement projects relating to improving Milwaukee's water quality and instituting storm water retention BMP. In response to requests from the Corridor neighborhoods, we will develop a young adult "Green Team," comprised of Corridor residents. From experience we know that it will take 2-3 days to complete each large GI project 1-2 day for smaller GI projects. The GT will be able to complete 3-4 projects per week (depending on size and complexity). The previous GT was very enthusiastic about their projects and very proud of the results. We will build on the positive experience and leverage involvement of Corridor residents into further contacts and trust.

Months Nine - Twelve: Teach residents how to maintain their existing installation, hold celebrations, conduct evaluation with partners.

The local environmental, public health and community climate resiliency (if applicable) results the project(s) seeks to achieve: Green Infrastructure installations such as rain gardens, rain barrels, and bio-swales and stormwater trees are some approaches that help neighborhoods manage the issues of stormwater runoff and increased precipitation that is predicted to be an effect of Climate Change. In addition, rainwater can be harvested for reuse through the installation of rain barrels and totes. Green infrastructure is prime examples of a proactive approach that can help our neighborhoods become cleaner, healthier, fair, and sustainable under the **Clean water act.**

How the project will achieve these results. Describe and/or identify activities designed to educate, empower and enable the community to understand the environmental, public health and community climate resiliency (if applicable) issues: Through our First Green Jobs program, 5 Green Team members will perform outreach to the community of the 30th St. Corridor to empower people to use water efficiently in their daily lives and take simple steps to reduce the risk of flooding and motivate residents to adopt sustainable water practices by completing residential GI water harvesting demonstrations such as rain gardens, bio-swales, rain water harvesting structures and rain barrels.

How the organization's efforts will increase the community's capacity to address local environmental, public health and community climate resiliency (if applicable) issues: The project team will work collaboratively with neighborhood groups and build on our partnerships, experience and our most recent green infrastructure work (summer 2014) to increase acceptance of GI through neighborhood-based installations. Based on our experience, demonstration installations and "See one Want One" are the best ways to overcome initial barriers to green infrastructure. Corridor residents are very familiar with the impacts of localized flooding but are generally unaware of green infrastructure and are not sure what to picture when they hear "rain gardens." Providing first-hand experience, and seeing GI installations results in much greater

acceptance. It is our objective to educate as many home owners and tenants, business owners and employees, volunteers, students, and event attendees as possible about the benefits and management requirements of Green Infrastructure (GI) and water conservation techniques to reduce the risk of flooding and increase rainwater harvesting and reuse.

Throughout the implementation of this program, our team will build on our existing contacts, and create new contacts from our rapport with other community partners to increase the number of Corridor organizations and residents engaged in Green Infrastructure projects.

How project relates to environmental statutes identified in Threshold Eligibility Form Include activities authorized by a the federal environmental statutes listed in Section 1.C:
Our project seeks to conduct training and demonstration projects regarding the reduction of water pollution through the installation of green infrastructure. Green Infrastructure manages storm water where it falls, thereby preventing polluted stormwater runoff from entering waterways.

V ii) Concise description of how GW Mke and its partners will work together during the year to address Climate Change:

The role of partners in addressing the local environmental, public health and community climate resiliency (if applicable) issue(s)

The nature of the organization(s) and what resources they bring to the partnership:

Partner Organization	Background / Role in Project
Franklin Heights Community Hands Block Watch	Residents are very interested in the community art project and beautification of vacant lots. This neighborhood has a 23 percentage of owner occupied homes. They have expressed interest in GWM's attending their community meetings to describe the project and identify homeowners who are interested in GI.
Uniting Garden Homes Neighborhood	We have met with leaders of this neighborhood group and they are interested in both Green Infrastructure and in their youth learning about green infrastructure and participating in stewardship activities. Our experience shows this neighborhood's relatively high percentage of owner-occupied homes (55%) and pride in its history, are strong indicators of successful GI installation because this pride extends to their rain gardens; bio-swales etc. and they will be well maintained.
Amani Neighborhood	Some of GWM 2014 Green Infrastructure projects included neighborhoods in the Amani area. Homeownership in the Amani neighborhood is at 36%. We will again partner with the Dominican Center as a lead organization in Amani to continue GI installations with our 2015 Green Team.
Sherman Park Community Association	Partnering with Sherman Park Community Association (SPCA) a very large neighborhood association with homeownership rates at 50.5% within the Corridor will help GWM with access to a significant portion of the Corridor. SPCA has a long rich history of resident engagement in their association area, which can assist GWM with their homeowner's contacts.

Washington Park Partners	Another strong Community Based Organization and Byrne Grant recipient that will help GWM to further its outreach to resident homeowners with their extensive resident contacts in their association area. Homeownership rates are listed at 34%, but these are homeowners with a rich history that we feel will fully embrace the program.
Metcalfe Park Community Action Team (MPCAT)	In the Metcalfe Park, and Borchert Field the homeownership rates are 41% and 34% respectively. Both of these neighborhoods were canvassed in the summer of 2014 where we performed 50 Green Infrastructure (GI) installations. While we have several requests for GI projects in Metcalfe and Borchert Field neighborhoods that could not be met by the end of the project, we anticipate only a few more projects.
Cold Spring Park:	Partnering with this smaller neighborhood on the southern reaches of the corridor where homeownership rates are 34% will give GWM the opportunity to access the southern neighborhoods of the Corridor. Homeownership data from 2010 U.S. Census Bureau.
Safe and Sound	This agency conducts a great deal of important canvasing throughout the Corridor. Their staff has consistently told us that they are happy to share with residents information about our positive "place-making" (gardens and GI) projects.

How the partner(s) have a vested interest in working with this partnership, commitments made, and specific activities it will be responsible for:

Partners have a vested interest in reducing the risk of flooding and basement backups, which can be alleviated by this project. Community leaders have made it their priority to ensure their youth participate in stewardship building and job training efforts.

How the applicant plans to maintain and sustain the partnerships: GW Mke is building on existing partnerships in the various Corridor neighborhoods by continuing to meet with their leadership and ensure that we are meeting their concerns and interests.

V. Organizational Capacity and Programmatic Capability

Organizational and administrative systems GW Mke has in place to appropriately manage, expend and account for Federal funds: GW Mke has adopted a formal Financial Management Policy; uses QuickBooks for its Accounting system, and contracts with M.L. Tharps Accounts for its quarterly financial reports. GWM maintains weekly time records for each employee and green team member and we allocate their time to specific projects.

How the applicant has successfully managed projects in the past: GW Mke successfully manages its federally funded Grants and Task Agreements by creating a task schedule for its activities and outputs and by monitoring actual versus expected outcomes on a monthly and quarterly basis to ensure it meets is milestones and ultimate outcomes. GW Mke also conducts evaluation interviews with partnering agencies at regular intervals to ascertain and implement areas of improvement.

How the applicant plans to effectively manage and successfully complete this proposed project: GW Mke intends to manage this by creating a task schedule for its activities and outputs and by monitoring actual versus expected outcomes on a monthly and quarterly basis to ensure it meets is milestones and ultimate outcomes.

Organizational experience to successfully achieve goals of proposed project: The GW Mke brings our community mobilization, and on-the-ground experience with residential and community-based green infrastructure to the forefront in implementing this exciting program. Groundwork's experience in 2011-2 in guiding or high school aged Green Team members in completing over 50 GI installations in the Kinnickinnic River Watershed. In addition, GWM created and managed a ten person adult green team (18-25 yrs. old) that partnered with 25 residents to install 33 rain gardens/bio-swales, 22 rain barrels and plant 60 storm water control trees in 2014. All of these projects were completed working an average of 20 hrs/week. If selected, the EJ project will leverage our extensive experience and contacts in the community.

Indicate past performance in meeting reporting requirement of EPA and other Federal grant/cooperative agreement in last five years. Include name of Project Officer overseeing grant/cooperative agreement and assistance agreement number of the projects:
GWM met the terms of its 2013-14 Task Agreement P13AC01209 (under Cooperative Agreement #P09AC0391) funded by the US Environmental Protection Agency, and submitted all required reports. Our Project Officer was Douglas Evans, Manager, GWM USA Initiative, of the NPS Rivers Trails and Conservation Assistance Program.
GW Mke also met the terms of its Great Lakes Restoration Initiative grant (#GL00E00573), including submitting all quarterly, semi-annual and closeout reports. The EPA Project Officer was Deborah Lamberty.

VI Qualifications of the Project Manager (PM)

Qualifications of PM as related to the Project: Antoine Carter has worked with Groundwork Milwaukee for 4 years. He gained experience working with Green Team members as a Site Supervisor, during which time GW Mke partnered with homeowners to install over 65 rain gardens and 50 rain barrels on their properties. As Program Manager of Milwaukee Urban Gardens Antoine Carter managed relationships with our 75 community garden partnerships.

PM's ties to community and/or organization: Antoine Carter grew up in the Corridor neighborhood of Franklin Heights and first met GW Mke staff while assisting his mother in her garden plot. He has maintained extensive ties to residents and knows many of the other organizers from his earlier years.

Pa**st activities that PM has worked on with the community**: Antoine Carter took the lead in working with Corridor residents in obtaining funding to build "Reggie's Garden," a memorial to his friend Reggie, (a victim of gunfire), and eleven other young people taken too soon by violence in the neighborhood. As GW Mke's Program Manager for our Milwaukee Urban Gardens program, he has worked with residents to develop and maintain 13 community gardens in the Corridor.

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VII. Past Performance in Reporting on Outputs and Outcomes

Federal grants and cooperative agreements worked on within the past three (3) years preferably EPA agreements). Include grant & cooperative agreement number, title of the project, the amount of funding, funding agency or organization and point-of-contact:
GWM recently completed the terms of its $25,000 2013-14 Task Agreement P13AC01209 under Cooperative Agreement #P09AC0391 funded by the US Environmental Protection Agency through a signed Interagency Agreement with the National Park Service/Dept. of the Interior. GW Mke received a Great Lakes Restoration Initiative GL00E00573 grant in September of 2010 (in the amount of $140,000) for the Habitat Improvement in the Estuary Environment project. Our Project Manager was Deborah Lamberty, for this project, which was closed out in September 2013.

How GW MKE documented and reported on progress towards expected outputs and outcomes under prior and/or current assistance agreements: GW Mke completed submitted the required narrative and financial reports. We successfully met all terms of the report including submitting the quarterly and final reports. GWM successfully managed its federally funded Task Agreements by creating a task schedule for its activities and outputs and by monitoring actual versus expected outcomes on a monthly and quarterly basis to ensure it met its milestones and ultimate outcomes.

GWM has over 50 metrics we use to determine success:
#Of people benefiting from projects
#Of youth actively engaged
#Of community Residents engaged
#Of youth participating in programs
#Of families benefiting from fresh food grown in gardens
Square yards of habitat restored
Square yards of green infrastructure installed
#Of rain barrels installed
#Of weeks of people in environmental and green jobs training

Progress on Prior Grants: We met the terms of our Grant and our Task Agreement.

VIII. Quality Assurance Project Plan (QAPP) Information

Indicate whether you believe that your project will involve the use of existing environmental data or the collection of new data:

We will rely on existing environmental data compiled by the Milwaukee Metropolitan Sewerage District. We do not believe we will be required to develop a QAPP.